| EP | | EH | MEANINGFUL USE 42 CFR 495.6(d)-(g)  (From the perspective of the 2014 EHR Reporting Period) | | 2014 Edition EHR CERTIFICATION CRITERIA 45 CFR 170.314 | STANDARDS |
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| Stage 1 Objective | Stage 1 Measure |  |  |
| CORE | **\*** | **\*** | Use CPOE for medication orders directly entered by any licensed healthcare professional who can enter orders into the medical record per State, local and professional guidelines. | More than 30% of medication orders created by the EP or authorized providers of the EH’s or CAH's inpatient or emergency department (POS 21 or 23) during the EHR reporting period are recorded using CPOE.  \*Exclusions apply: see CMS rule for details | §170.314(a)(1) |  |
| Computerized provider order entry. Enable a user to electronically record, change, and access the following order types, at a minimum:  (i) Medications;  (ii) Laboratory; and  (iii) Radiology/imaging. |
| **\*** | **\*** | Implement drug-drug and drug-allergy interaction checks. | The EP/EH/CAH has enabled this functionality for the entire EHR reporting period. | §170.314(a)(2) |  |
| Drug-drug, drug-allergy interaction checks.  (i) Interventions. Before a medication order is completed and acted upon during computerized provider order entry (CPOE), interventions must automatically and electronically indicate to a user drug-drug and drug-allergy contraindications based on a patient’s medication list and medication allergy list.  (ii) Adjustments.  (A) Enable the severity level of interventions provided for drug-drug interaction checks to be adjusted.  (B) Limit the ability to adjust severity levels to an identified set of users or available as a system administrative function. |
| **\*** |  | EPs: Record the following demographics:   * Preferred language * Gender * Race * Ethnicity * Date of birth. | More than 50% of all unique patients seen by the EP or admitted to the EH’s or CAH's inpatient or emergency department (POS 21 or 23) have demographics recorded as structured data. | §170.314(a)(3) | * § 170.207(f) – OMB standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity, Statistical Policy Directive No. 15, Oct 30, 1997. * § 170.207(g) – ISO 639-2 alpha-3 codes limited to those that also have a corresponding alpha-2 code in ISO 639-1. |
| Demographics.  (i) Enable a user to electronically record, change, and access patient demographic data including preferred language, sex, race, ethnicity, and date of birth.  (A) Enable race and ethnicity to be recorded in accordance with the standard specified in § 170.207(f) and whether a patient declines to specify race and/or ethnicity.  (B) Enable preferred language to be recorded in accordance with the standard specified in § 170.207(g) and whether a patient declines to specify a preferred language.  (ii) Inpatient setting only. Enable a user to electronically record, change, and access preliminary cause of death in the event of a mortality. |
|  | **\*** | EHs/CAHs: Record the following demographics:   * Preferred language * Gender * Race * Ethnicity * Date of birth * Date and preliminary cause of death in the event of mortality in the EH or CAH. |
| **\*** | **\*** | Record and chart changes in vital signs:   * Height/length * Weight * Blood pressure (BP) (age 3+) * Calculate and display BMI * Plot and display growth charts for children 0–20 years, including BMI. | More than 50% of all unique patients seen by the EP or admitted to the EH’s or CAH's inpatient or emergency department (POS 21 or 23) during the EHR reporting period have BP (for patients age 3+ only) and height/length and weight (for all ages) recorded as structured data.  \*Exclusions apply: see CMS rule for details | §170.314(a)(4) |  |
| Vital signs, body mass index, and growth charts.  (i) Vital signs. Enable a user to electronically record, change, and access, at a minimum, a patient’s height/length, weight, and blood pressure. Height/length, weight, and blood pressure must be recorded in numerical values only.  (ii) Calculate body mass index. Automatically calculate and electronically display body mass index based on a patient’s height and weight.  (iii) Optional – Plot and display growth charts. Plot and electronically display, upon request, growth charts for patients. |
| CORE | **\*** | **\*** | Maintain an up-to-date problem list of current and active diagnoses. | More than 80% of all unique patients seen by the EP or admitted to the EH’s or CAH’s inpatient or emergency department (POS 21 or 23) have at least one entry or an indication that no problems are known for the patient recorded as structured data. | §170.314(a)(5) | * § 170.207(a)(3) – IHTSDO SNOMED CT® International Release, July 2012; and US Extension to SNOMED CT,® March 2012. |
| Problem list. Enable a user to electronically record, change, and access a patient’s problem list:   1. Ambulatory setting. Over multiple encounters in accordance with, at a minimum, the version of the standard specified in § 170.207(a)(3); or 2. Inpatient setting. For the duration of an entire hospitalization in accordance with, at a minimum, the version of the standard specified in § 170.207(a)(3). |
| **\*** | **\*** | Maintain active medication list. | More than 80% of all unique patients seen by the EP or admitted to the EH’s or CAH’s inpatient or emergency department (POS 21 or 23) have at least one entry (or an indication that the patient is not currently prescribed any medication) recorded as structured data. | §170.314(a)(6) |  |
| Medication list. Enable a user to electronically record, change, and access a patient’s active medication list as well as medication history:  (i) Ambulatory setting. Over multiple encounters; or  (ii) Inpatient setting. For the duration of an entire hospitalization. |
| **\*** | **\*** | Maintain active medication allergy list. | More than 80% of all unique patients seen by the EP or admitted to the EH’s or CAH’s inpatient or emergency department (POS 21 or 23) have at least one entry (or an indication that the patient has no known medication allergies) recorded as structured data. | §170.314(a)(7) |  |
| Medication allergy list. Enable a user to electronically record, change, and access a patient’s active medication allergy list as well as medication allergy history:  (i) Ambulatory setting. Over multiple encounters; or  (ii) Inpatient setting. For the duration of an entire hospitalization. |
| **\*** |  | EP: Implement one clinical decision support rule relevant to specialty or high clinical priorityalong with the ability to track compliance with that rule. | Implement one clinical decision support rule. | §170.314(a)(8)  Clinical decision support.   * + - 1. Evidence-based decision support interventions.Enable a limited set of identified users to select (i.e., activate) one or more electronic clinical decision support interventions (in addition to drug-drug and drug-allergy contraindication checking) based on each one and at least one combination of the following data:   (A) Problem list;  (B) Medication list;  (C) Medication allergy list;  (D) Demographics;  (E) Laboratory tests and values/results; and  (F) Vital signs.  (ii) Linked referential clinical decision support.  (A) EHR technology must be able to:  (1) Electronically identify for a user diagnostic and therapeutic reference information; or  (2) Electronically identify for a user diagnostic and therapeutic reference information in accordance with the standard specified at § 170.204(b) and the implementation specifications at § 170.204 (b)(1) or (2).  (B) For paragraph (a)(8)(ii)(A) of this section, EHR technology must be able to electronically identify for a user diagnostic or therapeutic reference information based on each one and at least one combination of the data referenced in paragraphs (a)(8)(i)(A) through (F) of this section.  (iii) Clinical decision support configuration.  (A) Enable interventions and reference resources specified in paragraphs (a)(8)(i) and (ii) of this section to be configured by a limited set of identified users (e.g., system administrator) based on a user’s role.  (B) EHR technology must enable interventions to be electronically triggered:  (1) Based on the data referenced in paragraphs (a)(8)(i)(A) through (F) of this section.  (2) When a patient’s medications, medication allergies, and problems are incorporated from a transition of care/referral summary received pursuant to paragraph (b)(1)(iii) of this section.  (3) Ambulatory setting only. When a patient’s laboratory tests and values/results are incorporated pursuant to paragraph (b)(5)(i)(A)(1) of this section.  (iv) Automatically and electronically interact. Interventions triggered in accordance with paragraphs (a)(8)(i)-(iii) of this section must automatically and electronically occur when a user is interacting with EHR technology.  (v) Source attributes. Enable a user to review the attributes as indicated for all clinical decision support resources:  (A) For evidence-based decision support interventions under paragraph (a)(8)(i) of this section:  (1) Bibliographic citation of the intervention (clinical research/guideline);  (2) Developer of the intervention (translation from clinical research/guideline);  (3) Funding source of the intervention development technical implementation; and  (4) Release and, if applicable, revision date(s) of the intervention or reference source.  (B) For linked referential clinical decision support in paragraph (a)(8)(ii) of this section and drug-drug, drug-allergy interaction checks in paragraph(a)(2) of this section, the developer of the intervention, and where clinically indicated, the bibliographic citation of the intervention (clinical research/guideline). | * § 170.204(b) – HL7 V3 Standard: Context-Aware Retrieval Application (Infobutton). * *Implementation specifications:* § 170.204(b)(1) – HL7 V3 IG: URL-Based Implementations of Context-Aware Information Retrieval (Infobutton) Domain; or § 170.204(b)(2) – HL7 V3 IG: Context-Aware Knowledge Retrieval (Infobutton) Service-Oriented Architecture Implementation Guide. |
|  | **\*** | EHs/CAHs: Implement one clinical decision support rule related to a high priority hospital conditionalong with the ability to track compliance with that rule. |
| CORE |  |  |  |  |
| **\*** | **\*** | Record smoking status for patients 13 years old or older. | More than 50% of all unique patients 13 years old or older seen by the EP or admitted to the EH’s or CAH’s inpatient or emergency department (POS 21 or 23) have smoking status recorded as structured data.  \*Exclusions apply: see CMS rule for details | §170.314(a)(11) | * § 170.207(h) – Coded to one of the following SNOMED CT® codes:   (1) Current every day smoker. 449868002  (2) Current some day smoker. 428041000124106  (3) Former smoker. 8517006  (4) Never smoker. 266919005  (5) Smoker, current status unknown. 77176002  (6) Unknown if ever smoked. 266927001  (7) Heavy tobacco smoker. 428071000124103  (8) Light tobacco smoker. 428061000124105 |
| Smoking status. Enable a user to electronically record, change, and access the smoking status of a patient in accordance with the standard specified at § 170.207(h). |
| **\*** |  | Generate and transmit permissible prescriptions electronically (eRx). | More than 40% of all permissible prescriptions written by the EP are transmitted electronically using CEHRT.  \*Exclusions apply: see CMS rule for details | §170.314(b)(3)  Electronic prescribing. Enable a user to electronically create prescriptions and prescription-related information for electronic transmission in accordance with:  (i) The standard specified in § 170.205(b)(2); and  (ii) At a minimum, the version of the standard specified in § 170.207(d)(2). | * § 170.205(b)((2) – NCPDP SCRIPT version 10.6. * § 170.207(d)(2) – RxNorm, August 6, 2012 Release. |
| CORE | **\*** | **\*** | Protect electronic health information created or maintained by the CEHRT through the implementation of appropriate technical capabilities. | Conduct or review a security risk analysis in accordance with the requirements under 45 CFR 164.308(a)(1) and implement security updates as necessary and correct identified security deficiencies as part of its risk management process. | §170.314(d)(1) |  |
| Authentication, access control, and authorization.  (i) Verify against a unique identifier(s) (e.g., username or number) that a person seeking access to electronic health information is the one claimed; and  (ii) Establish the type of access to electronic health information a user is permitted based on the unique identifier(s) provided in paragraph (d)(1)(i) of this section, and the actions the user is permitted to perform with the EHR technology. |
| §170.314(d)(2)  Auditable events and tamper-resistance.   1. Record actions. EHR technology must be able to:   (A) Record actions related to electronic health information in accordance with the standard specified in § 170.210(e)(1);  (B) Record the audit log status (enabled or disabled) in accordance with the standard specified in § 170.210(e)(2) unless it cannot be disabled by any user; and  (C) Record the encryption status (enabled or disabled) of electronic health information locally stored on end-user devices by EHR technology in accordance with the standard specified in § 170.210(e)(3) unless the EHR technology prevents electronic health information from being locally stored on end-user devices (see 170.314(d)(7) of this section).  (ii) Default setting. EHR technology must be set by default to perform the capabilities specified in paragraph (d)(2)(i)(A) of this section and, where applicable, paragraphs (d)(2)(i)(B) or (d)(2)(i)(C), or both paragraphs (d)(2)(i)(B) and (C).  (iii) When disabling the audit log is permitted.  For each capability specified in paragraphs (d)(2)(i)(A), (B), and (C) of this section that EHR technology permits to be disabled, the ability to do so must be restricted to a limited set of identified users.  (iv) Audit log protection. Actions and statuses recorded in accordance with paragraph (d)(2)(i) must not be capable of being changed, overwritten, or deleted by the EHR technology.  (v) Detection. EHR technology must be able to detect whether the audit log has been altered. | * § 170.210(e)(1)(i) – The audit log must record the information specified in sections 7.2 through 7.4, 7.6, and 7.7 of the standard specified at § 170.210(h) when EHR technology is in use. * § 170.210(e)(1)(ii) – The date and time must be recorded in accordance with the standard specified at § 170.210(g). * § 170.210(e)(2)(i) – The audit log must record the information specified in sections 7.2 and 7.4 of the standard specified at § 170.210(h) when the audit log status is changed. * § 170.210(e)(2)(ii) – The date and time each action occurs in accordance with the standard specified at § 170.210(g). * § 170.210(e)(3) – The audit log must record the information specified in sections 7.2 and 7.4 of the standard specified at § 170.210(h) when the encryption status of electronic health information locally stored by the EHR technology on end-user devices is changed. The date and time each action occurs in accordance with the standard specified at § 170.210(g). |
| CORE | **\*** | **\*** | Protect electronic health information created or maintained by the CEHRT through the implementation of appropriate technical capabilities.  {Continued} | Conduct or review a security risk analysis in accordance with the requirements under 45 CFR 164.308(a)(1) and implement security updates as necessary and correct identified security deficiencies as part of its risk management process.  {Continued} | §170.314(d)(3) | * § 170.210(e)(1)(i) – The audit log must record the information specified in sections 7.2 through 7.4, 7.6, and 7.7 of the standard specified at § 170.210(h) when EHR technology is in use. * § 170.210(e)(1)(ii) – The date and time must be recorded in accordance with the standard specified at § 170.210(g). * § 170.210(e)(2)(i) – The audit log must record the information specified in sections 7.2 and 7.4 of the standard specified at § 170.210(h) when the audit log status is changed. * § 170.210(e)(2)(ii) – The date and time each action occurs in accordance with the standard specified at § 170.210(g). * § 170.210(e)(3) – The audit log must record the information specified in sections 7.2 and 7.4 of the standard specified at § 170.210(h) when the encryption status of electronic health information locally stored by the EHR technology on end-user devices is changed. The date and time each action occurs in accordance with the standard specified at § 170.210(g). |
| Audit report(s). Enable a user to create an audit report for a specific time period and to sort entries in the audit log according to each of the data specified in the standards at § 170.210(e). |
| §170.314(d)(4) |  |
| Amendments. Enable a user to electronically select the record affected by a patient’s request for amendment and perform the capabilities specified in paragraphs (d)(4)(i) or (ii) of this section.  (i) Accepted amendment. For an accepted amendment, append the amendment to the affected record or include a link that indicates the amendment’s location.  (ii) Denied amendment. For a denied amendment, at a minimum, append the request and denial of the request to the affected record or include a link that indicates this information’s location. |
| §170.314(d)(5) |  |
| Automatic log-off. Prevent a user from gaining further access to an electronic session after a predetermined time of inactivity. |
| §170.314(d)(6) |  |
| Emergency access. Permit an identified set of users to access electronic health information during an emergency. |
| CORE | **\*** | **\*** | Protect electronic health information created or maintained by the CEHRT through the implementation of appropriate technical capabilities.  {Continued} | Conduct or review a security risk analysis in accordance with the requirements under 45 CFR 164.308(a)(1) and implement security updates as necessary and correct identified security deficiencies as part of its risk management process.  {Continued} | §170.314(d)(7) | * § 170.210(a)(1) – Any encryption algorithm identified by the NIST as an approved security function in Annex A of the Federal Information Processing Standards (FIPS) Publication 140-2. |
| End-user device encryption. Paragraph (d)(7)(i) or (ii) of this section must be met to satisfy this certification criterion.   * + 1. EHR technology that is designed to locally store electronic health information on end-user devices must encrypt the electronic health information stored on such devices after use of EHR technology on those devices stops.   (A) Electronic health information that is stored must be encrypted in accordance with the standard specified in § 170.210(a)(1).  (B) Default setting. EHR technology must be set by default to perform this capability and, unless this configuration cannot be disabled by any user, the ability to change the configuration must be restricted to a limited set of identified users.  (ii) EHR technology is designed to prevent electronic health information from being locally stored on end-user devices after use of EHR technology on those devices stops. |
| §170.314(d)(8) | * § 170.210(c) – A hashing algorithm with a security strength equal to or greater than SHA-1 (Secure Hash Algorithm) as specified by the NIST in FIPS PUB 180-4 (March, 2012) must be used to verify that electronic health information has not been altered. |
| Integrity.  (i) Create a message digest in accordance with the standard specified in § 170.210(c).  (ii) Verify in accordance with the standard specified in § 170.210(c) upon receipt of electronically exchanged health information that such information has not been altered. |
| §170.314(d)(9) | * § 170.210(d) – The date, time, patient identification, user identification, and a description of the disclosure must be recorded for disclosures for treatment, payment, and health care operations, as these terms are defined at 45 CFR 164.501. |
| Optional– Accounting of disclosures.Record disclosures made for treatment, payment, and health care operations in accordance with the standard specified in §170.210(d). |
| **\*** |  | EPs: Provide patients the ability to view online, download, and transmit their health information within 4 business days of the information being available to the EP. | More than 50% of all unique patients seen by the EP during the EHR reporting period are provided timely (within 4 business days after the information is available to the EP) online access to their health information subject to the EP's discretion to withhold certain information. | §170.314(e)(1)  View, download, and transmit to 3rd party.  (i) EHR technology must provide patients (and their authorized representatives) with an online means to view, download, and transmit to a 3rd party the data specified below. Access to these capabilities must be through a secure channel that ensures all content is encrypted and integrity-protected in accordance with the standard for encryption and hashing algorithms specified at § 170.210(f).  (A) View. Electronically view in accordance with the standard adopted at § 170.204(a), at a minimum, the following data:  (*1*) The Common MU Data Set\*\* (which should be in their English (i.e., non-coded) representation if they associate with a vocabulary/code set).  (*2*) Ambulatory setting only. Provider’s name and office contact information.  (*3*) Inpatient setting only. Admission and discharge dates and locations; discharge instructions; and reason(s) for hospitalization.  (B) Download.  (*1*) Electronically download an ambulatory summary or inpatient summary (as applicable to the EHR technology setting for which certification is requested) in human readable format or formatted according to the standard adopted at § 170.205(a)(3) that includes, at a minimum, the following data (which, for the human readable version, should be in their English representation if they associate with a vocabulary/code set):  (i) Ambulatory setting only. All of the data specified in paragraph (e)(1)(i)(A)(*1*) and (e)(1)(i)(A)(*2*) of this section.  (ii) Inpatient setting only. All of the data specified in paragraphs (e)(1)(i)(A)(*1*) and (e)(1)(i)(A)(*3*) of this section.  (*2*) Inpatient setting only. Electronically download transition of care/referral summaries that were created as a result of a transition of care (pursuant to the capability expressed in the certification criterion adopted at paragraph (b)(2) of this section).  (C) Transmit to third party.  (*1*) Electronically transmit the ambulatory summary or inpatient summary (as applicable to the EHR technology setting for which certification is requested) created in paragraph (e)(1)(i)(B)(*1*) of this section in accordance with the standard specified in § 170.202(a).  (*2*) Inpatient setting only. Electronically transmit transition of care/referral summaries (as a result of a transition of care/referral) selected by the patient (or their authorized representative) in accordance with the standard specified in § 170.202(a).  (ii) Activity history log.  (A) When electronic health information is viewed, downloaded, or transmitted to a third-party using the capabilities included in paragraphs (e)(1)(i)(A) through (C) of this section, the following information must be recorded and made accessible to the patient:  (*1*) The action(s) (i.e., view, download, transmission) that occurred;  (*2*) The date and time each action occurred in accordance with the standard specified at § 170.210(g); and  (*3*) The user who took the action.  (B) EHR technology presented for certification may demonstrate compliance with paragraph (e)(1)(ii)(A) of this section if it is also certified to the certification criterion adopted at § 170.314(d)(2) and the information required to be recorded in paragraph (e)(1)(ii)(A) is accessible by the patient. | * § 170.210(f) – Any encryption and hashing algorithm identified by NIST as an approved security function of Annex A of the FIPS Publication 140-2. * § 170.204(a) – Web Content Accessibility Guidelines (WCAG) 2.0, Level A Conformance. * § 170.205(a)(3) – HL7 Implementation Guide for CDA Release 2: IHE Health Story Consolidation. The use of the “unstructured document” document-level template is prohibited. * § 170.202(a) – Applicability Statement for Secure Health Transport. * § 170.210(g) – The data and time recorded utilize a system clock that has been synchronized following (RFC 1305) Network Time Protocol, or (RFC 5905) Network Time Protocol Version 4.   \*\* Common MU Data Set – see end of document. |
|  | **\*** | EHs/CAHs: Provide patients the ability to view online, download, and transmit information about a hospital admission. | More than 50% of all unique patients who are discharged from the inpatient or emergency department (POS 21 or 23) of an EH or CAH have their information available online within 36 hours of discharge. |
| CORE |  |  | View, download, and transmit to 3rd party.  {Continued} |  |
| **\*** |  | Provide clinical summaries for patients for each office visit. | Clinical summaries provided to patients for more than 50% of all office visits within 3 business days.  \*Exclusions apply: see CMS rule for details | §170.314(e)(2) | * § 170.205(a)(3) – HL7 Implementation Guide for CDA Release 2: IHE Health Story Consolidation. The use of the “unstructured document” document-level template is prohibited.   \*\* Common MU Data Set – see end of document. |
| Ambulatory setting only – clinical summary.  (i) Create. Enable a user to create a clinical summary for a patient in human readable format and formatted according to the standards adopted at § 170.205(a)(3).  (ii) Customization. Enable a user to customize the data included in the clinical summary.  (iii) Minimum data from which to select. EHR technology must permit a user to select, at a minimum, the following data when creating a clinical summary:  (A) Common MU Data Set\*\* (which, for the human readable version, should be in their English representation if they associate with a vocabulary/code set)  (B) The provider’s name and office contact information; date and location of visit; reason for visit; immunizations and/or medications administered during the visit; diagnostic tests pending; clinical instructions; future appointments; referrals to other providers; future scheduled tests; and recommended patient decision aids. |
| Menu | **\*** | **\*** | Implement drug-formulary checks. | The EP/EH/CAH has enabled this functionality and has access to at least one internal or external drug formulary for the entire EHR reporting period.  \*Exclusions apply: see CMS rule for details | §170.314(a)(10) |  |
| Drug-formulary checks. EHR technology must automatically and electronically check whether a drug formulary (or preferred drug list) exists for a given patient and medication. |
| **\*** | **\*** | Generate lists of patients by specific conditions to use for quality improvement, reduction of disparities, research, or outreach. | Generate at least one report listing patients of the EP, EH, or CAH with a specific condition. | §170.314(a)(14) |  |
| Patient list creation*.* Enable a user to electronically and dynamically select, sort, access, and create patient lists by: date and time; and based on each one and at least one combination of the following data:  (i) Problems;  (ii) Medications;  (iii) Medication allergies;  (iv) Demographics;  (v) Laboratory tests and values/results; and  (vi) Ambulatory setting only. Patient communication preferences. |
| **\*** |  | Send reminders to patients per patient preference for preventative/follow up care. | More than 20% of all unique patients 65 years or older or 5 years old or younger were sent an appropriate reminder during the EHR reporting period.  \*Exclusions apply: see CMS rule for details |  |
| **\*** | **\*** | Use CEHRT to identify patient-specific education resources and provide those resources to the patient. | More than 10% of all unique patients admitted to the EH’s or CAH's inpatient or emergency departments (POS 21 or 23) are provided patient-specific education resources. | §170.314(a)(15) | * § 170.204(b) – HL7 V3 Standard: Context-Aware Retrieval Application (Infobutton). * *Implementation specifications:* § 170.204(*b)(1)* – *HL7 V3 Implementation Guide: URL-Based Implementations of Context-Aware Information Retrieval (Infobutton) Domain; or* § 170.204*(b)(2)* – *HL7 V3 Implementation Guide: Context-Aware Knowledge Retrieval (Infobutton) Service-Oriented Architecture Implementation Guide.* |
| Patient-specific education resources. EHR technology must be able to electronically identify for a user patient-specific education resources based on data included in the patient's problem list, medication list, and laboratory tests and values/results:  (i) In accordance with the standard specified at § 170.204(b) and the implementation specifications at § 170.204(b)(1) or (2); and  (ii) By any means other than the method specified in paragraph (a)(15)(i). |
|  | **\*** | Record advance directives for patients 65 years old or older. | More than 50% of all unique patients 65 years old or older admitted to the EH’s or CAH's inpatient department (POS 21) have an indication of an advance directive status recorded. | §170.314(a)(17) |  |
| Inpatient setting only – advance directives. Enable a user to electronically record whether a patient has an advance directive. |
| Menu | **\*** | **\*** | The EP, EH, or CAH who transitions their patient to another setting of care or provider of care or refers their patient to another provider of care should provide summary care record for each transition of care or referral. | The EP, EH, or CAH that transitions or refers their patient to another setting of care or provider of care provides a summary of care record for more than 50% of transitions of care and referrals.  \*Exclusions apply: see CMS rule for details | §170.314(b)(1) & (b)(2)  Transitions of care: (b)(1) – receive, display, and incorporate transition of care/referral summaries.  (i) Receive. EHR technology must be able to electronically receive transition of care/referral summaries in accordance with:  (A) The standard specified in § 170.202(a).  (B) Optional. The standards specified in § 170.202(a) and (b).  (C) Optional. The standards specified in § 170.202(b) and (c).  (ii) Display. EHR technology must be able to electronically display in human readable format the data included in transition of care/referral summaries received and formatted according to any of the following standards (and applicable implementation specifications) specified in: § 170.205(a)(1), § 170.205(a)(2), and § 170.205(a)(3).  (iii) Incorporate. Upon receipt of a transition of care/referral summary formatted according to the standard adopted at § 170.205(a)(3), EHR technology must be able to:  (A) Correct patient. Demonstrate that the transition of care/referral summary received is or can be properly matched to the correct patient.  (B) Data incorporation. Electronically incorporate the following data expressed according to the specified standard(s):  (*1*) Medications. At a minimum, the version of the standard specified in §170.207(d)(2);  (*2*) Problems. At a minimum, the version of the standard specified in §170.207(a)(3);  (*3*) Medication allergies. At a minimum, the version of the standard specified in §170.207(d)(2).  (C) Section views. Extract and allow for individual display each additional section or sections (and the accompanying document header information) that were included in a transition of care/referral summary received and formatted in accordance with the standard adopted at § 170.205(a)(3).  Transitions of care: (b)(2) – create and transmit transition of care/referral summaries.  (i) Create. Enable a user to electronically create a transition of care/referral summary formatted according to the standard adopted at § 170.205(a)(3) that includes, at a minimum, the Common MU Data Set\*\* and the following data expressed, where applicable, according to the specified standard(s):  (A) Encounter diagnoses. The standard specified in § 170.207(i) or, at a minimum, the version of the standard specified § 170.207(a)(3);  (B) Immunizations. The standard specified in § 170.207(e)(2);  (C) Cognitive status;  (D) Functional status; and  (E) Ambulatory setting only. The reason for referral; and referring or transitioning provider’s name and office contact information.  (F) Inpatient setting only. Discharge instructions.  (ii) Transmit. Enable a user to electronically transmit the transition of care/referral summary created in paragraph (b)(2)(i) of this section in accordance with:  (A) The standard specified in § 170.202(a).  (B) Optional. The standards specified in § 170.202(a) and (b).  (C) Optional. The standards specified in § 170.202(b) and (c). | * § 170.202(a) – Applicability Statement for Secure Health Transport. * § 170.202(b) – XDR and XDM for Direct Messaging Specification. * § 170.202(c) – Transport and Security Specification. * § 170.205(a)(1) – HL7 CDA Release 2, CCD. *Implementation specifications*: HITSP Summary Documents Using HL7 CCD Component HITSP/C32. * § 170.205(a)(2) – ASTM E2369 Standard Specification for Continuity of Care Record and Adjunct to ASTM E2369. * § 170.205(a)(3) – HL7 Implementation Guide for CDA Release 2: IHE Health Story Consolidation. The use of the “unstructured document” document-level template is prohibited. * § 170.207(d)(2) – RxNorm, August 6, 2012 Release. * § 170.207(a)(3) – IHTSDO SNOMED CT® International Release, July 2012; and US Extension to SNOMED CT,® March 2012. * § 170.207(i) – The code set specified at 45 CFR 162.1002(c)(2) for the indicated conditions. * 170.207(e)(2) – HL7 Standard Code Set CVX – Vaccines Administered, updates through July 11, 2012.   \*\* Common MU Data Set – see end of document. |
| MENU  Menu | **\*** | **\*** | The EP, EH, or CAH who receives a patient from another setting of care or provider of care or believes an encounter is relevant should perform medication reconciliation. | The EP, EH or CAH performs medication reconciliation for more than 50% of transitions of  care in which the patient is:  **[EP]** transitioned into the care of the EP.  **[EH/CAH]** admitted to the eligible hospital’s or CAH’s inpatient or emergency department (POS 21 or 23).  \*Exclusions apply: see CMS rule for details | §170.314(b)(4) |  |
| Clinical information reconciliation. Enable a user to electronically reconcile the data that represent a patient’s active medication, problem, and medication allergy list as follows. For each list type:  (i) Electronically and simultaneously display (i.e., in a single view) the data from at least two list sources in a manner that allows a user to view the data and their attributes, which must include, at a minimum, the source and last modification date.  (ii) Enable a user to create a single reconciled list of medications, medication allergies, or problems.  (iii) Enable a user to review and validate the accuracy of a final set of data and, upon a user’s confirmation, automatically update the list. |
| **\*** | **\*** | Incorporate clinical lab-test results into EHR as structured data. | More than 40% of all clinical lab test results ordered by the EP or by an authorized provider of the EH or CAH for patients admitted to its inpatient or emergency department (POS 21 or 23) during the EHR reporting period whose results are either in a positive/negative or numerical format are incorporated in CEHRT.  \*Exclusions apply: see CMS rule for details | §170.314(b)(5)  Incorporate laboratory tests and values/results.  (i) Receive results.  (A) Ambulatory setting only.  (*1*) Electronically receive and incorporate clinical laboratory tests and values/results in accordance with the standard specified in § 170.205(j) and, at a minimum, the version of the standard specified in § 170.207(c)(2).  (*2*) Electronically display the tests and values/results received in human readable format.  (B) Inpatient setting only. Electronically receive clinical laboratory tests and values/results in a structured format and electronically display such tests and values/results in human readable format.  (ii) Electronically display all the information for a test report specified at 42 CFR 493.1291(c)(1) through (7).  (iii) Electronically attribute, associate, or link a laboratory test and value/result with a laboratory order or patient record. | * § 170.205(j) – HL7 Version 2.5.1. Implementation Guide: S&I Framework Lab Results Interface. * § 170.207(c)(2) – LOINC® version 2.40, June 2012, a universal code system for indentifying laboratory and clinical observations produced by the Regenstrief Institute, Inc. |
| **\*** | **\*** | Capability to submit electronic data to immunization registries or immunization information systems and actual submission except where prohibited and according to applicable law and practice. | Performed at least one test of CEHRT's capacity to submit electronic data to immunization registries and follow up submission if the test is successful (unless none of the immunization registries to which the EP, EH, or CAH submits such information have the capacity to receive the information electronically).  \*Exclusions apply: see CMS rule for details | §170.314(f)(1) / §170.314(f)(2) | * § 170.205(e)(3) – HL7 2.5.1. *Implementation specifications*: Hl7 2.5.1 Implementation Guide for Immunization Messaging, Release 1.4 * § 170.207(e)(2) – HL7 Standard Code Set CVX -- Vaccines Administered, updates through July 11, 2012. |
| Immunization information. Enable a user to electronically record, change, and access immunization information.  Transmission to immunization registries. EHR technology must be able to electronically create immunization information for electronic transmission in accordance with:  (i) The standard and applicable implementation specifications specified in § 170.205(e)(3); and  (ii) At a minimum, the version of the standard specified in § 170.207(e)(2). |
| **\*** | **\*** | Capability to submit electronic syndromic surveillance data to public health agencies and actual submission except where prohibited and according to applicable law and practice. | Performed at least one test of CEHRTs capacity to provide electronic syndromic surveillance data to public health agencies and follow up submission if the test is successful (unless none of the public health agencies to which the EP, EH, or CAH submits such information have the capacity to receive the information electronically.  \*Exclusions apply: see CMS rule for details | §170.314(f)(3)  Transmission to public health agencies – syndromic surveillance. EHR technology must be able to electronically create syndrome-based public health surveillance information for electronic transmission in accordance with:  (i) Ambulatory setting only.  (A) The standard specified in § 170.205(d)(2).  (B) Optional. The standard (and applicable implementation specifications) specified in § 170.205(d)(3).  (ii) Inpatient setting only. The standard (and applicable implantation specifications) specified in § 170.205(d)(3). | * § 170.205(d)(2) – HL7 2.5.1. * § 170.205(d)(3) – HL7 2.5.1. *Implementation specifications*: PHIN Messaging Guide for Syndromic Surveillance and Conformance Clarification for EHR Certification of Electronic Syndromic Surveillance, Addendum to PHIN Messaging Guide for Syndromic Surveillance. |
|  | **\*** | Capability to submit electronic data on reportable (as required by State or local law) lab results to public health agencies and actual submission except where prohibited and according to applicable law and practice. | Performed at least one test of CEHRT’s capacity to provide electronic submission or reportable lab results to public health agencies and follow up submission if the test is successful (unless none of the public health agencies to which the EH or CAH submits such information have the capacity to receive the information electronically).  \*Exclusions apply: see CMS rule for details | §170.314(f)(4) | * § 170.205(g) – HL7 2.5.1. *Implementation specifications:* HL7 Version 2.5.1 Implementation Guide: Electronic Laboratory Reporting to Public Health, Release 1 (US Realm) with Errata and Clarifications, and ELR 2.5.1 Clarification Document for EHR Technology Certification. * § 170.207(a)(3) – IHTSDO SNOMED CT® International Release, July 2012 and US Extension to SNOMED CT,® March 2012 Release. * § 170.207(c)(2) – LOINC® version 2.40, June 2012, a universal code system for indentifying laboratory and clinical observations produced by the Regenstrief Institute, Inc. |
| Inpatient setting only—transmission of reportable laboratory tests and values/results. EHR technology must be able to electronically create reportable laboratory tests and values/results for electronic transmission in accordance with:  (i) The standard (and applicable implementation specifications) specified in § 170.205(g); and  (ii) At a minimum, the versions of the standards specified in § 170.207(a)(3) and (c)(2). |
|  | **\*** | **\*** | Objective is incorporated directly into the definition of a meaningful EHR user and eliminated as an objective.  See CMS’s regulation for CQM reporting requirements. | | §170.314(c)(1)-(3)  (1) Clinical Quality Measures – capture and export.  (i) Capture. For each and every CQM for which the EHR technology is presented for certification, EHR technology must be able to electronically record all of the data identified in the standard specified at § 170.204(c) that would be necessary to calculate each CQM. Data required for CQM exclusions or exceptions must be codified entries, which may include specific terms as defined by each CQM, or may include codified expressions of “patient reason,” “system reason,” or “medical reason.”  (ii) Export. EHR technology must be able to electronically export a data file formatted in accordance with the standards specified at § 170.205(h) that includes all of the data captured for each and every CQM to which EHR technology was certified under paragraph (c)(1)(i) of this section.  (2) Clinical quality measures – import and calculate.  (i) Import. EHR technology must be able to electronically import a data file formatted in accordance with the standard specified at § 170.205(h) and use such data to perform the capability specified in paragraph (c)(2)(ii) of this section. EHR technology presented for certification to all three of the certification criteria adopted in paragraphs (c)(1) through (3) of this section is not required to meet paragraph (c)(2)(i).  (ii) Calculate. EHR technology must be able to electronically calculate each and every clinical quality measure for which it is presented for certification.  (3) Clinical quality measures – electronic submission. Enable a user to electronically create a data file for transmission of clinical quality measurement data:  (i) In accordance with the standards specified at § 170.205(h) and (k); and  (ii) That can be electronically accepted by CMS. | * § 170.204(c) – Data Element Catalog. * § 170.205(h) – HL7 Implementation Guide for CDA® Release 2: Quality Reporting Document Architecture * § 170.205(k) – Quality Reporting Document Architecture—Category III, DSTU Release 1. |
|  |  |  | N/A | N/A | §170.314(b)(7) | * § 170.205(a)(3) – HL7 Implementation Guide for CDA Release 2: IHE Health Story Consolidation. The use of the “unstructured document” document-level template is prohibited. * § 170.207(i) – The code set specified at 45 CFR 162.1002(c)(2) for the indicated conditions. * § 170.207(a)(3) – IHTSDO SNOMED CT® International Release, July 2012; and US Extension to SNOMED CT,® March 2012. * 170.207(e)(2) – HL7 Standard Code Set CVX – Vaccines Administered, updates through July 11, 2012.   \*\* Common MU Data Set – see end of document. |
| Data portability. Enable a user to electronically create a set of export summaries for all patients in EHR technology formatted according to the standard adopted at § 170.205(a)(3) that represents the most current clinical information about each patient and includes, at a minimum, the Common MU Data Set\*\* and the following data expressed, where applicable, according to the specified standard(s):  Encounter diagnoses. The standard specified in § 170.207(i) or, at a minimum, the version of the standard at § 170.207(a)(3);  Immunizations. The standard specified in § 170.207(e)(2);  Cognitive status;  Functional status; and  Ambulatory setting only. The reason for referral; and referring or transitioning provider’s nave and office contact information.  Inpatient setting only. Discharge instructions. |
|  |  | N/A | N/A | §170.314(g)(1) |  |
| Automated numerator recording. For each meaningful use objective with a percentage-based measure, EHR technology must be able to create a report or file that enables a user to review the patients or actions that would make the patient or action eligible to be included in the measure’s numerator. The information in the report or file created must be of sufficient detail such that it enables a user to match those patients or actions to meet the measure's denominator limitations when necessary to generate an accurate percentage. |
|  |  | N/A | N/A | §170.314(g)(2) |  |
| Automated measure calculation. For each meaningful use objective with a percentage-based measure that is supported by a capability included in an EHR technology, electronically record the numerator and denominator and create a report including the numerator, denominator, and resulting percentage associated with each applicable meaningful use measure. |
|  |  | N/A | N/A | §170.314(g)(3) |  |
| Safety-enhanced design. User-centered design processes must be applied to each capability  an EHR technology includes that is specified in the following certification criteria: § 170.314(a)(1), (2), (6) through (8), and (16) and (b)(3) and (4). |
|  |  | N/A | N/A | §170.314(g)(4) |  |
| Quality management system. For each capability that an EHR technology includes and for which that capability's certification is sought, the use of a Quality Management System (QMS) in the development, testing, implementation and maintenance of that capability must be identified.  (i) If a single QMS was used for applicable capabilities, it would only need to be identified once.  (ii) If different QMS were applied to specific capabilities, each QMS applied would need to be identified. This would include the application of a QMS to some capabilities and none to others.  (iii) If no QMS was applied to all applicable capabilities such a response is acceptable to satisfy this certification criterion. |

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| **COMMON MU DATA SET\*\*** | |
| **Data** | **Standards** |
| Common MU Data Set means the following data expressed, where indicated, according to the specified standard(s):   * + - * 1. Patient name.         2. Sex.         3. Date of birth.         4. Race – the standard specified in § 170.207(f).         5. Ethnicity – the standard specified in § 170.207(f).         6. Preferred language – the standard specified in § 170.207(g).         7. Smoking status – the standard specified in § 170.207(h).         8. Problems – at a minimum, the version of the standard specified in § 170.207(a)(3)         9. Medications– at a minimum, the version of the standard specified in § 170.207(d)(2).         10. Medication allergies – at a minimum, the version of the standard specified in § 170.207(d)(2).         11. Laboratory test(s) – at a minimum, the version of the standard specified in § 170.207(c)(2).         12. Laboratory value(s)/result(s).         13. Vital signs – height, weight, blood pressure, BMI.         14. Care plan field(s), including goals and instructions.         15. Procedures –   (i) At a minimum, the version of the standard specified in § 170.207(a)(3) or § 170.207(b)(2).   * + 1. Optional. The standard specified at § 170.207(b)(3).     2. Optional. The standard specified at § 170.207(b)(4).   (16) Care team member(s). | * § 170.207(f) – OMB standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity, Statistical Policy Directive No. 15, Oct 30, 1997. * § 170.207(g) – ISO 639-2 alpha-3 codes limited to those that also have a corresponding alpha-2 code in ISO 639-1. * § 170.207(h) – Coded to one of the following SNOMED CT® codes:   (1) Current every day smoker. 449868002  (2) Current some day smoker. 428041000124106  (3) Former smoker. 8517006  (4) Never smoker. 266919005  (5) Smoker, current status unknown. 77176002  (6) Unknown if ever smoked. 266927001  (7) Heavy tobacco smoker. 428071000124103  (8) Light tobacco smoker. 428061000124105   * § 170.207(a)(3) – IHTSDO SNOMED CT® International Release, July 2012; and US Extension to SNOMED CT,® March 2012. * § 170.207(d)(2) – RxNorm, August 6, 2012 Release. * § 170.207(c)(2) – LOINC® version 2.40, June 2012, a universal code system for indentifying laboratory and clinical observations produced by the Regenstrief Institute, Inc. |